

Group G - Fraction Lesson Design and Contributions

Members: Pengfei Li, Ashton Henry, Annie Orukotan, Kyuho Chang, Hongsik Kim

Lesson Description:

This Lesson is an introduction to fraction learning. The target students are in Grade 3 (roughly 7 - 8 years old) in elementary school. Those students have already finished learning plus/minus and multiplication/division. In this class, they will understand what is a fraction and how could fractions be related to our daily life which will refer to Merrill's First Principles.

Learning outcomes:

1. Students will be familiar with a fraction
2. Students will know how to read and write a fraction
3. Students will learn how to compare fractions (basic skills not for complex problems)

Section Design:

1. Section #1: What we learned before (the existing knowledge)

Responsible: **Annie**

Section 1 is a warm-up part of the entire lecture. Students will recall what they have already learned about math during this section. The section should include knowledge of plus/minus and multiplication/division.

2. Section #2: Video Introduction

Responsible: **Ashton**

Section 2 is the introduction of the new content. Instead of using traditional skills, Ashton will provide a video that vividly explains what is fraction, and how fractions connect to our daily life.

Notice: a life-related example MUST be demonstrated in the video

3. Section #3: Learn to read and write

Responsible: **Hongsik**

Section 3 is the first skill-learning section. In this section, Hongsik will teach students how to read and write fractions properly using multimedia skills.

4. Section #4: Learn to compare

Responsible: **Kyuho**

Section 4 is the second skill-learning section. In this section, Kyuho will teach students how to compare different fractions. One thing to mention is that this is an introductory lecture. Students will learn complex fraction-comparing skills in a future lecture. The example in this section should not be too hard.

5. Class activity (interactive)

Responsible: **Pengfei Li**

Section 5 is the in-class activity section. Students in this section will review what they learned in this lecture. The activity design should refer to what we learned in active learning week. The proper tool can be H5P or HTML online gaming. There should be at least 3 games which refer to reading, writing and comparing fractions respectively.

What must have:

Each person's section needs to have:

At least 2 paragraphs

1 Multimedia approach

May have: Infographic, video, podcast, storyboard, H5P interactive content.

This is for sections #1, #3 and #4. Sections #2 and #5 are fixed which is a video and some interactive games respectively.

2 slides of what we learned (principles)

Should use what we learned from our EDCI337 lectures. Each section needs to at least refer to two principles and write them down in a paragraph.

Deadline:

Finish everything before April 1st night meeting (7:00 pm)

During the meeting, we only talk about the contents and correct the grammar issues.

Submission Responsible:

Pengfei Li

Contribution to the Project:

Project framework design and this document: Pengfei Li

Project section #1: Annie Orukotan

Project section #2: Ashton Henry

Project section #3: Hongsik Kim

Project section #4: Kyuho chang

Project section #5: Pengfei Li